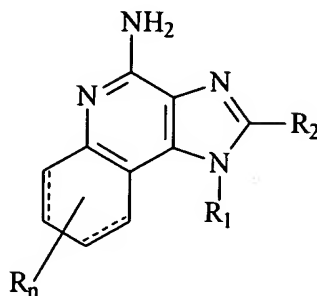


WHAT IS CLAIMED IS

1. A pharmaceutical composition comprising a therapeutically effective amount of a compound of the formula (I):



(I)

wherein

R₁ is -C₂₋₄ alkyl-NR₃-CO-R₄ wherein R₄ is aryl, substituted aryl, heteroaryl, substituted heteroaryl, or alkyl;

R₂ is selected from the group consisting of:

-hydrogen;

-alkyl;

-alkenyl;

-aryl;

-(substituted aryl);

-heteroaryl;

-(substituted heteroaryl);

-heterocyclyl;

-(substituted heterocyclyl);

-alkyl-O-aryl;

-alkyl -O-alkyl;

-alkyl-O-alkenyl; and

-alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

-OH;

-halogen;
 -N(R₃)₂;
 -CO-N(R₃)₂;
 -CO-C₁₋₁₀ alkyl;
 5 -CO-O-C₁₋₁₀ alkyl;
 -N₃;
 -aryl;
 -(substituted aryl);
 -heteroaryl;
 10 -(substituted heteroaryl);
 -heterocyclyl;
 -(substituted heterocyclyl);
 -CO-aryl; and
 -CO-heteroaryl;

15 each R₃ is independently selected from the group consisting of hydrogen; C₁₋₁₀ alkyl-heteroaryl; C₁₋₁₀ alkyl-(substituted heteroaryl); C₁₋₁₀ alkyl-aryl; C₁₋₁₀ alkyl-(substituted aryl) and C₁₋₁₀ alkyl;

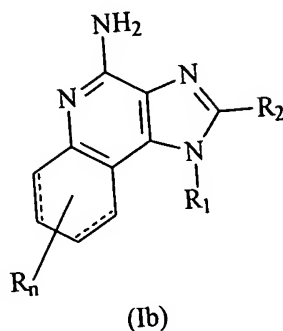
n is 0 to 4;

20 and each R present is independently selected from the group consisting of C₁₋₁₀ alkyl, C₁₋₁₀ alkoxy, halogen and trifluoromethyl, or a pharmaceutically acceptable salt thereof, in combination with a pharmaceutically acceptable carrier.

2. The composition of claim 1 wherein R₃ is hydrogen.

25 3. The composition of claim 1 wherein R₂ is selected from the group consisting of hydrogen; C₁₋₄ alkyl; and C₁₋₄ alkyl-O-C₁₋₄ alkyl.

4. A pharmaceutical composition comprising a therapeutically effective amount of a compound of the formula (Ib):



5 wherein

R_1 is $-C_{2-4}$ alkyl- NR_3 -CO- R_4 wherein R_4 is heterocyclyl or substituted heterocyclyl;

R_2 is selected from the group consisting of:

- 10 -hydrogen;
- alkyl;
- alkenyl;
- aryl;
- 15 -(substituted aryl);
- heteroaryl;
- (substituted heteroaryl);
- heterocyclyl;
- (substituted heterocyclyl);
- alkyl-O-aryl;
- 20 -alkyl -O-alkyl;
- alkyl-O-alkenyl; and
- alkyl or alkenyl substituted by one or more substituents selected from the

group consisting of:

- 25 -OH;
- halogen;

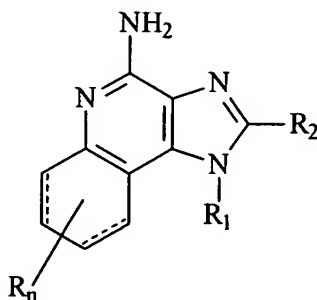
-N(R₃)₂;
 -CO-N(R₃)₂;
 -CO-C₁₋₁₀ alkyl;
 -CO-O-C₁₋₁₀ alkyl;
 -N₃;
 -aryl;
 -(substituted aryl);
 -heteroaryl;
 -(substituted heteroaryl);
 -heterocyclyl;
 -(substituted heterocyclyl);
 -CO-aryl; and
 -CO-heteroaryl;

each R₃ is independently selected from the group consisting of hydrogen; C₁₋₁₀ alkyl-heteroaryl; C₁₋₁₀ alkyl-(substituted heteroaryl); C₁₋₁₀ alkyl-aryl; C₁₋₁₀ alkyl-(substituted aryl) and C₁₋₁₀ alkyl;

n is 0 to 4;

and each R present is independently selected from the group consisting of C₁₋₁₀ alkyl, C₁₋₁₀ alkoxy, halogen and trifluoromethyl, or a pharmaceutically acceptable salt thereof, in combination with a pharmaceutically acceptable carrier.

5. A compound of the formula (Id):



(Id)

wherein

R_1 is $-C_{2-4}$ alkyl- NR_3 -CO- R_4 wherein R_4 is heteroaryl or substituted heteroaryl;

R_2 is selected from the group consisting of:

- hydrogen;
- 5 -alkyl;
- alkenyl;
- aryl;
- (substituted aryl);
- heteroaryl;
- 10 -(substituted heteroaryl);
- heterocyclyl;
- (substituted heterocyclyl);
- alkyl-O-aryl;
- alkyl -O-alkyl;
- 15 -alkyl-O-alkenyl; and
- alkyl or alkenyl substituted by one or more substituents selected from the

group consisting of:

- OH;
- halogen;
- 20 - $N(R_3)_2$;
- CO- $N(R_3)_2$;
- CO- C_{1-10} alkyl;
- CO-O- C_{1-10} alkyl;
- N_3 ;
- 25 -aryl;
- (substituted aryl);
- heteroaryl;
- (substituted heteroaryl);
- heterocyclyl;
- 30 -(substituted heterocyclyl);
- CO-aryl; and
- CO-heteroaryl;

each R_3 is independently selected from the group consisting of hydrogen; C_{1-10} alkyl-heteroaryl; C_{1-10} alkyl-(substituted heteroaryl); C_{1-10} alkyl-aryl; C_{1-10} alkyl-(substituted aryl) and C_{1-10} alkyl;

n is 0 to 4;

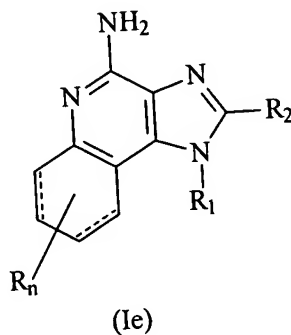
5 and each R present is independently selected from the group consisting of C_{1-10} alkyl, C_{1-10} alkoxy, halogen and trifluoromethyl, or a pharmaceutically acceptable salt thereof.

6. A compound of claim 5 wherein n is 0.

10 7. A compound of claim 5 wherein R_2 is selected from the group consisting of hydrogen, C_{1-4} alkyl, and C_{1-4} alkyl-O- C_{1-4} alkyl.

8. A compound of claim 5 wherein R_3 is hydrogen.

15 9. A compound of the formula (Ie):



wherein

20 R_1 is $-C_{2-4}$ alkyl- NR_3 -CO- C_{1-8} alkyl;

R_2 is selected from the group consisting of:

-hydrogen;

-alkyl;

-alkenyl;

25 -aryl;

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-(substituted aryl);
-heteroaryl;
-(substituted heteroaryl);
-heterocyclyl;
-(substituted heterocyclyl);
-alkyl-O-aryl;
-alkyl -O-alkyl;
-alkyl-O-alkenyl; and
-alkyl or alkenyl substituted by one or more substituents selected from the
group consisting of:

-OH;
-halogen;
-N(R₃)₂;
-CO-N(R₃)₂;
-CO-C₁₋₁₀ alkyl;
-N₃;
-aryl;
-(substituted aryl);
-heteroaryl;
-(substituted heteroaryl);
-heterocyclyl;
-(substituted heterocyclyl);
-CO-aryl; and
-CO-heteroaryl;

each R₃ is independently selected from the group consisting of hydrogen; C₁₋₁₀ alkyl-heteroaryl; C₁₋₁₀ alkyl-(substituted heteroaryl); C₁₋₁₀ alkyl-aryl; C₁₋₁₀ alkyl-(substituted aryl) and C₁₋₁₀ alkyl;

n is 0 to 4;

and each R present is independently selected from the group consisting of C₁₋₁₀ alkyl, C₁₋₁₀ alkoxy, halogen and trifluoromethyl, or a pharmaceutically acceptable salt thereof.

10. A compound of claim 9 wherein n is 0.
11. A compound of claim 9 wherein R₂ is selected from the group consisting of hydrogen, C₁₋₄ alkyl, and C₁₋₄ alkyl-O-C₁₋₄ alkyl.
12. A compound of claim 9 wherein R₃ is hydrogen.
13. A pharmaceutical composition comprising a therapeutically effective amount of a compound selected from the group consisting of:
- (2*S*,3*S*)-*N*-{4-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]butyl}-1-methyl-5-oxo-2-pyridin-3-ylpyrrolidine-3-carboxamide;
- N*-{4-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]butyl}-1-[(4-*tert*-butylphenyl)sulfonyl]-L-prolinamide;
- N*-[8-(4-amino-2-butyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)octyl]benzamide;
- N*-{8-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]octyl}benzamide;
- N*-[3-(4-amino-2-butyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)propyl]benzamide;
- N*-{3-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]-2,2-dimethylpropyl}benzamide;
- N*-[8-(4-amino-1*H*-imidazo[4,5-*c*]quinolin-1-yl)octyl]benzamide;
- N*-{3-[4-amino-2-(3-phenoxypropyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]propyl}-4-bromobenzamide;
- N*-{3-[4-amino-2-(3-phenoxypropyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]propyl}benzamide;
- N*-{3-[4-amino-2-(2-methoxyethyl)-6,7,8,9-tetrahydro-1*H*-imidazo[4,5-*c*]quinolin-1-yl]propyl}benzamide; and
- N*-{3-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]propyl}benzamide; or a pharmaceutically acceptable salt thereof in combination with a pharmaceutically acceptable carrier.
14. A compound selected from the group consisting of:
- N*-{4-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]butyl}isoquinoline-3-carboxamide;

N-{4-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]butyl}quinoline-3-carboxamide;
N-{4-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]butyl}quinoxaline-2-carboxamide;
5 *N*-[3-(4-amino-2-butyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)propyl]isoquinoline-3-carboxamide;
N-{3-[4-amino-2-(2-methoxyethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]propyl}isoquinoline-3-carboxamide;
N-[4-(4-amino-2-ethyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)butyl]cyclopentanecarboxamide;
10 *N*-[4-(4-amino-2-methyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)butyl]cyclohexanecarboxamide;
N-[4-(4-amino-2-ethyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)butyl]-2-methylpropanamide;
N-[4-(4-amino-2-ethyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)butyl]butanamide;
N-[4-(4-amino-2-methyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)butyl]cyclopentanecarboxamide;
N-[4-(4-amino-2-methyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)butyl]-2-methylpropanamide;
15 *N*-[4-(4-amino-2-methyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)butyl]butanamide;
N-[4-(4-amino-2-ethyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)butyl]cyclohexanecarboxamide;
N-[3-(4-amino-2-methyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)propyl]cyclohexanecarboxamide;
N-[3-(4-amino-2-methyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)propyl]cyclopentanecarboxamide;
20 *N*-[3-(4-amino-2-methyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)propyl]-2-methylpropanamide;
N-[3-(4-amino-2-methyl-1*H*-imidazo[4,5-*c*]quinolin-1-yl)propyl]butanamide; and
N-{2-[4-amino-2-(ethoxymethyl)-1*H*-imidazo[4,5-*c*]quinolin-1-yl]-1,1-dimethylethyl}-2-ethoxyacetamide;
25 or a pharmaceutically acceptable salt thereof.

15. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 5 in combination with a pharmaceutically acceptable carrier.

30 16. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 9 in combination with a pharmaceutically acceptable carrier.

17 A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 14 in combination with a pharmaceutically acceptable carrier.

18. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a composition of claim 1 to the animal.

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19. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a composition of claim 4 to the animal.

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20. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a composition of claim 13 to the animal.

21. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a composition of claim 15 to the animal.

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22. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a composition of claim 16 to the animal.

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23. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a composition of claim 17 to the animal.

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